## Message

From: Gillespie, Andrew [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP

(FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=DCE99ECE87694A06B3009D7756E2A89E-GILLESPIE, ANDREW]

**Sent**: 6/7/2017 1:39:43 PM

**To**: Price, PaulS [Price.PaulS@epa.gov]

CC: Kenneke, John [Kenneke.John@epa.gov]; Pierce, Tom [Pierce.Tom@epa.gov]

Subject: RE: STICS: Clearance Initiation: #ORD-022061: An analysis of cumulative risks based on biomonitoring data for six

phthalates using the Maximum Cumulative Ratio

Thanks. I thought this was now a key deliverable for NCEA? Is it still on our books?

Andrew J. R. Gillespie, Ph. D. Interim Director, EPA/ORD/NERL/CED Associate Director, EPA/ORD/NERL

From: Price, PaulS

Sent: Tuesday, June 06, 2017 4:29 PM

To: Gillespie, Andrew < Gillespie. Andrew@epa.gov>

Cc: Kenneke, John < Kenneke. John@epa.gov>; Pierce, Tom < Pierce. Tom@epa.gov>

Subject: FW: STICS: Clearance Initiation: #ORD-022061: An analysis of cumulative risks based on biomonitoring data for

six phthalates using the Maximum Cumulative Ratio

Andy:

The long debated phthalate mixture paper has been entered into STICs "Clearance Initiation: #ORD-022061: An analysis of cumulative risks based on biomonitoring data for six phthalates using the Maximum Cumulative Ratio". This is a key deliverable for NERL under HHRA and it has a deadline for submission to Environmental Health Perspectives by the end of June (3<sup>rd</sup> quarter of 2017).

Your help is much appreciated.

Paul

From: ORD STICS@epa.gov [mailto:ORD STICS@epa.gov]

Sent: Tuesday, June 06, 2017 12:28 PM

To: Jones, Samantha <<u>Jones.Samantha@epa.gov</u>>; Gatchett, Annette <<u>Gatchett.Annette@epa.gov</u>>; Jarabek, Annie <<u>Jarabek.Annie@epa.gov</u>>; Frithsen, Jeff <<u>Frithsen.Jeff@epa.gov</u>>; Bahadori, Tina <<u>Bahadori.Tina@epa.gov</u>>; Vandenberg, John <<u>Vandenberg.John@epa.gov</u>>; Bussard, David <<u>Bussard.David@epa.gov</u>>; Jones, Ashley <<u>Jones.Ashley@epa.gov</u>>; Price, PaulS <<u>Price.PaulS@epa.gov</u>>; Hagerthey, Scot <<u>Hagerthey.Scot@epa.gov</u>>; Shams, Dahnish <<u>Shams.Dahnish@epa.gov</u>>; D'Amico, Louis <<u>DAmico.Louis@epa.gov</u>>; Ross, Mary <<u>Ross.Mary@epa.gov</u>>; Reyes, Jeanette <<u>Reyes.Jeanette@epa.gov</u>>; Tewolde, Salina <<u>tewolde.salina@epa.gov</u>>; Noel, James <<u>Noel.James@epa.gov</u>>; Gillespie, Andrew <<u>Gillespie.Andrew@epa.gov</u>>; Thayer, Kris <<u>thayer.kris@epa.gov</u>>; Richmond-Bryant, Jennifer <<u>Richmond-Bryant.Jennifer@epa.gov</u>>; Wright, Michael <<u>Wright.Michael@epa.gov</u>>; Subject: STICS: Clearance Initiation: #ORD-022061: An analysis of cumulative risks based on biomonitoring data for six phthalates using the Maximum Cumulative Ratio

This e-mail is to inform you that you have been copied on the following Human Health Risk Assessment clearance submission in STICS:

- Product type, subtype: Journal Article, Peer Reviewed
- **Product title:** An analysis of cumulative risks based on biomonitoring data for six phthalates using the Maximum Cumulative Ratio
- Author(s): Reyes, J and P. PriceInitiator: PaulS Price,ord/nerl/ced
- ORD Tracking Number: Tracking # ORD-022061
- Product Description / Abstract: Background: The Maximum Cumulative Ratio (MCR) quantifies the degree to which a single chemical drives the cumulative risk of an individual exposed to multiple chemicals. Phthalates are a class of chemicals with ubiquitous exposures in the general population. Objectives: To use the MCR to evaluate coexposures to six phthalates as measured in biomonitoring data from most recent cycle of the National Health and Nutrition Examination Survey (NHANES). Methods: The values of MCR, Hazard Index (HI), and phthalate-specific Hazard Quotients (HQs) were determined for NHANES participants by calculating steady-state doses consistent with concentrations of metabolites in urine and using Tolerable Daily Intake values. Results: There were 21 participants (0.8% of the NHANES sample) with HI>1. Of those, 43% (9/21) would be missed by chemical-by-chemical assessments (i.e. all HQs were less than or equal to one). The median MCR value was 2.0 and HI and MCR values were negatively correlated (p1 was not driven by age, gender, or ethnicity. Cumulative exposures of concern originated from three of the fifteen possible pairs of the six phthalates. Conclusion: These findings suggest that cumulative exposures were a potential concern for a small portion of the surveyed participants involving a subset of the phthalates explored. However, the largest risks were dominated by exposures to a single phthalate.

## Tracking and Planning

- o Task ID: 3.233
- o Task: Applying Epigenetic Data to Cumulative Risk
- o Product Title: N/A Not Applicable
- o Product Description: N/A Not Applicable
- o Project: Cumulative Risk Assessment Methods and Applications
- Topic: Community and Site-specific Risk
- o Research Program Area: Human Health Risk Assessment
- Product Category: Does not require Advance Notification
- QA form attached in STICS?: No
- QAPP Reference: N/A
- Keywords:
  - o Cumulative exposures
  - o Cumulative risk
  - Phthalates
  - Children's Environmental Health
- Journal Name: ENVIRONMENTAL HEALTH PERSPECTIVES

This submission can be found in your In Progress tab. Please click here to access STICS.